

**Notice of Allowability**

Application No.

09/990,723

Examiner

William H. Mayo III

Applicant(s)

MCMAHON, ROY P.

Art Unit

2831

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to April 22, 2004.
2. ☒ The allowed claim(s) is/are 1-7, 11-20, 24, 25 and 27-33.
3. ☒ The drawings filed on 22 April 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

William H. Mayo III  
Primary Examiner  
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## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. Claims 1-7, 9-20, 24-25, and 27-33 are allowed.
2. The following is an examiner's statement of reasons for allowance: This invention deals with an electrical cable comprising a spiral conductor insulation overlying the spiral conductor, wherein the spiral conductor structures have no electrically conducting shielding, wherein at least some of the spiral conductor structures have different signal-carrying identities, and wherein at least some of the spiral conductor structures having different signal-carrying identities are arranged responsive to a crosstalk threat between the various spiral conductor structures (claim 1). This invention also deals electrical cable having a plurality of spiral conductor structures overlying and spirally wrapped around the central conductor structure, wherein at least one of the spiral conductor structures has a signal-carrying identity and wherein each of the spiral conductor structures comprises an electrically conducting spiral conductor, and wherein each spiral conductor structure has no electrically conducting shielding thereon, and wherein each spiral conductor structure retains same pair of circumferentially adjacent spiral conductor structures along a length of the electrical cable, wherein each spiral conductor structure has a designated identity, wherein the circumferential arrangement of each spiral conductor structure that is selected responsive to its designated identity and to the designated identities of each of the pair of circumferentially adjacent spiral conductor structures (claim 11). This invention also method of preparing an electrical

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cable, comprising the steps of providing a plurality of spiral conductor structures each having a designated signal-carrying identity and comprising an electrically conducting spiral conductor, and a spiral conductor insulation overlying the spiral conductor, each spiral conductor structure having no electrically conducting shielding thereon; selecting a circumferential arrangement of each spiral conductor structure responsive to its designated identity and to the designated identities of each of a pair of circumferentially adjacent spiral conductor structures, wherein the step of selecting includes the step of arranging the spiral conductor structures responsive to a power carried by each spiral conductor structure and responsive to the power carried by the circumferentially adjacent pair of spiral conductor structures; wrapping the spiral conductor structures around the central conductor structure in a spiral pattern, wherein each spiral conductor structure retains the same pair of circumferentially adjacent spiral conductor structures along a length of the electrical cables (claim 17). This invention also deals with an electrical cable comprising a plurality of spiral conductor structures overlying and spirally wrapped around the central conductor structure, each of the spiral conductor structures comprising an electrically conducting spiral conductor, wherein each spiral conductor structure is unshielded, wherein each of the spiral conductor structures has a designated identity, and wherein at least a first one of the spiral conductor structures has two circumferentially adjacent spiral conductor structures each having a different identity than the first one of the electrically conducting structures (claim 29). This invention also deals with an electrical cable comprising a plurality of spiral conductor structures overlying and spirally wrapped around the central conductor structure,

wherein a circumferential positioning of the spiral conductor structures relative to each other is responsive to a signal carried by each spiral conductor structure, and wherein each of the spiral conductor structures comprises an electrically conducting spiral conductor, wherein each spiral conductor structure is unshielded (claim 30). The above stated claim limitations, in combination with other claim limitations, is not taught or suggested by the prior art of record. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Response to Arguments***

3. Applicant's arguments filed January 23, 2004 have been fully considered and they are persuasive. Specifically, the applicant states that the that Griffin fails to teach or suggest the spiral conductor structures having no electrically conducting shielding, wherein at least some of the spiral conductor structures have different signal-carrying identities, because the conductors of Griffin are power conductors and not signal carrying conductors, is persuasive and therefore the claims have been allowed.

### ***Communication***

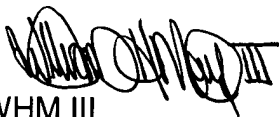
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-

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272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



WHM III  
March 31, 2004

William H. Mayo III  
Primary Examiner  
Art Unit 2831